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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/951,188	10/15/1997	DAVID H. PRICE	IOWA-012/FUS	1309

23720 7590 09/09/2003

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EXAMINER

STEADMAN, DAVID J

ART UNIT

PAPER NUMBER

1652

DATE MAILED: 09/09/2003

24

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)
	08/951,188	PRICE, DAVID H.
	Examiner David J Steadman	Art Unit 1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 June 2003 .

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) See Continuation Sheet is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) See Continuation Sheet is/are allowed.

6) Claim(s) 133 and 136 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

Continuation of Disposition of Claims: Claims pending in the application are 110-113,116-164,167-172,174-184,186-189,191-193,195-208 and 211-218.

Continuation of Disposition of Claims: Claims allowed are 110-113,116-132,134,135,137-164,167-172,174-184,186-189,191-193,195-208 and 211-218.

**DETAILED ACTION**

***Status of the Application***

[1] Claims 110-113, 116-164, 167-172, 174-184, 186-189, 191-193, 195-208, and 211-218 are pending in the application.

[2] Applicant's cancellation of claims 185, 190, and 194, amendment to claims 110-113, 116-143, 149-152, 157-164, 167-172, 174-184, 186-189, 191-193, 195-198, 203-208, and 215-216, and addition of claims 217-218 in Paper No. 23, filed June 13, 2003, is acknowledged.

[3] It is noted that the examiner agreed to contact applicant concerning any changes to the claims that may be necessary to secure allowance of the instant application (see page 31 bottom of Paper No. 23). The examiner attempted to contact applicant by telephone on September 03, 2003 to discuss the remaining issues in the case. However, applicant could not be reached and time considerations necessitated the instant Office action. Applicant is strongly encouraged to contact the examiner upon receipt of the instant Office action to discuss the remaining issues stated below.

***Specification/Informalities***

[4] The specification discloses the nucleic acid of SEQ ID NO:46 encodes the polypeptide of SEQ ID NO:47 (see, e.g., page 50 of the specification). However, based on a sequence comparison, it appears the nucleic acid of SEQ ID NO:46 does not encode SEQ ID NO:47. Amino acid 207 of SEQ ID NO:47 is serine, however, the corresponding codon of SEQ ID NO:46 encodes a cysteine. Appropriate correction is required.

***Claim Rejections - 35 USC § 112, Second Paragraph***

[5] Claims 133 and 136 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The claims are rejected because it is unclear as to how the nucleic acid fragment of claim 113 can further comprise a promoter sequence or a distinct, selected peptide-encoding sequence when no such sequence is present in the nucleic acid fragment of claim 113. It is suggested that applicant clarify the meaning of the claims.

***Conclusion*****[6] Status of the claims:**

- Claims 110-113, 116-164, 167-172, 174-184, 186-189, 191-193, 195-208, and 211-218 are pending.
- Claims 133 and 136 are rejected.
- Claims 110-113, 116-132, 134-135, 137-164, 167-172, 174-184, 186-189, 191-193, 195-208, and 211-218 are in condition for allowance.

**THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Steadman, whose telephone number is (703) 308-3934. The Examiner can normally be reached Monday-Friday from 7:00 am to 5:00 pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (703) 308-3804. The FAX number for submission of official papers to Group 1600 is (703) 308-4242. Draft or informal FAX communications should be directed to (703) 746-5078. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Art Unit receptionist whose telephone number is (703) 308-0196.

David J. Steadman  
Patent Examiner  
Art Unit 1652

*Rebecca Prouty*  
REBECCA E. PROUTY  
PRIMARY EXAMINER  
CNSP 1600  
1652

Office: 10D-04  
Mailbox: 10D-01

**Please search the following sequences in pending and interference databases:**

- 1) Standard search of SEQ ID NO:2 against nucleic acid databases. ✓✓
- 2) Oligo search of SEQ ID NO:4 against nucleic acid databases (please size limit to 50 nucleotides). ✓✓
- 3) Oligo search of SEQ ID NO:45 against nucleic acid databases (please size limit to 60 nucleotides). ✓
- 4) Oligo search of SEQ ID NO:47 against nucleic acid databases (please size limit to 60 nucleotides). ✓
- 5) Oligo search of SEQ ID NO:50 against nucleic acid databases (please size limit to 400 nucleotides).
- 6) Standard search of SEQ ID NO:4 against nucleic acid databases. ✓✓
- 7) Standard search of SEQ ID NO:45 against nucleic acid databases. ✓
- 8) Standard search of SEQ ID NO:47 against nucleic acid databases. ✓
- 9) Standard search of SEQ ID NO:50 against nucleic acid databases. interference
- 10) Standard search of SEQ ID NO:6 against nucleic acid databases. Pending
- 11) Standard search of SEQ ID NO:3 against nucleic acid databases. ✓✓
- 12) Standard search of SEQ ID NO:44 against nucleic acid databases. ✓
- 13) Standard search of SEQ ID NO:46 against nucleic acid databases. ✓
- 14) Standard search of SEQ ID NO:49 against nucleic acid databases. interference

*Please save results to diskette.*

Thank you very much.

David J. Steadman  
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703-308-3934